

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An information-gathering device being configured to gather information relating to a pulse comprising:

a sensor module being configured to be mounted to a mounting area on a body; and

a supporter being configured to mount said sensor module,

said sensor module comprising,

a motion detector being configured to detect motion components generated along with changes in the shape of said mounting area, and to output a motion detection signal, and

a pulse wave detector being configured to detect pulse wave components corresponding to a pulsating flow in said body, and to output a pulse wave detection signal, and

a removal processor being configured to remove said motion components from said pulse wave detection components.
2. (Original) The information-gathering device according to claim 1, wherein said motion detector comprises a pressure sensor, a load sensor, or a displacement sensor.

3. (Original) The information-gathering device according to claim 1, wherein said pulse wave detector comprises a pulse wave sensor, and said motion detector has a detection position thereof disposed adjacent said pulse wave sensor.

4. (Previously Presented) The information-gathering device according to claim 2, wherein

said pulse wave detector comprises a pulse wave sensor, and said motion detector has a detection position thereof disposed on a reverse side or same side of said mounting area in relation to said pulse wave sensor, said motion detector is positioned such that the same axis that passes through a detection position of said pulse wave sensor and said mounting portion passes through said motion detector.

5. (Original) The information-gathering device according to claim 1, wherein said sensor module comprises a transmitter being configured to transmit said motion detection signal and said pulse wave detection signal.

6. (Original) The information-gathering device according to claim 5, wherein said sensor module further comprises a power generation device connected to said motion detector and said pulse wave detector configured to convert kinetic energy to electric energy and to supply electric energy to said information-gathering device.

7. - 10. (Canceled).

11. (Original) An information-gathering device being configured to gather information relating to a pulse comprising:

a sensor module being configured to be mounted to a mounting area on a body; and

a supporter being configured to mount said sensor module,

said sensor module comprising,

a first motion detector being configured to detect motion components generated along with changes in the shape of said mounting area, and to output a first motion detection signal,

a second motion detector being configured to detect motion components generated along with body movement, and to output a second motion detection signal,
~~and~~

a pulse wave detector being configured to detect pulse wave components corresponding to a pulsating flow in said body, and to output a pulse wave detection signal, and

a removal processor being configured to remove motion components by using said second motion detection signal when said second motion detector detects said motion components, and to remove motion components by using said first motion detection signal when said second motion detector does not detect said motion components.

12. (Canceled).

13. (Original) The information-gathering device according to claim 11, wherein said first motion detector comprises a pressure sensor, a load sensor, or a displacement sensor.

14. (Original) The information-gathering device according to claim 11, wherein said second motion detector comprises an acceleration sensor.

15. (Original) The information-gathering device according to claim 11, wherein said pulse wave detector comprises a pulse wave sensor, and said first and second motion detectors have detection positions thereof disposed adjacent said pulse wave sensor.

16. (Original) The information-gathering device according to claim 11, wherein said pulse wave detector comprises a pulse wave sensor, and said first and second motion detectors have the detection positions thereof disposed on the reverse side or the same side of said mounting area in relation to said pulse wave sensor, said first and second motion detectors are positioned such that the same axis that passes through a detection position of said pulse wave sensor passes through said first and second motion detectors.

17. (Original) The information-gathering device according to claim 11, wherein said sensor module comprises a transmitter being configured to transmit said motion detection signal and said pulse wave detection signal.

18. (Original) The information-gathering device according to claim 17, further comprising a power generation device connected to said first and second motion detectors and said pulse wave detector to supply electric energy.

19. (Original) The information-gathering device according to claim 17, further comprising,
a portable device having a receiver, and
a pulse rate calculator,
said receiver being configured to receive said first and second motion detection signals and said pulse wave detection signal from said transmitter and said pulse rate calculator being configured to calculate said pulse rate using said first and second motion detection signals and said pulse wave detection signal received by said receiver.

20. (Original) The information-gathering device according to claim 19, wherein said pulse rate calculator comprises,
a filter coefficient generator being configured to generate an adaptive filter coefficient using said pulse wave detection signal and at least one of said first motion detection signal and said second motion detection signal, and
a removal processor being configured to subtract from the pulse wave detection signal at least one of said first motion detection signal to which said adaptive filter coefficient has been applied and said second motion detection signal to which said adaptive filter coefficient has been applied.

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21. - 23. (Canceled).